

What Is Claimed Is:

1. A spindle motor, comprising:

5 a frame upwardly extruded in a tubular shape at its center portion and having a holder having a core mounted to its outer diameter portion;

a metal bearing press-fit to the holder of the frame and having a stepped portion at its outer peripheral surface;

10 a shaft rotatably inserted into the metal bearing and provided with a thrust washer at its lower end portion;

15 a rotor having a magnet coupled to the upper end of the shaft for communicating with the core at the inner diameter surface, and an annular type mounting groove having an engaging portion extruded at the center of the upper end portion at equal intervals;

a thrust plate for shielding the lower end portion of the frame into which the metal bearing is press fit; and

20 a stopper of which one end is inserted into the mounting groove of the rotor to be fixed to the engaging portion and of which the other end portion is supported by one side of the frame.

2. The method according to claim 1, wherein the stopper comprises:

25 a cylindrical body closely contacted and fixed to the

inner diameter surface of the holder while covering the outer diameter surface of the metal bearing; and

a thin flange unit vertically bent to one end of the body, extended to the outside, passing through the mounting
5 groove, and thus engaged to the engaging portion of the rotor.

3. The method according to claim 2, wherein the flange unit has a plurality of insertion grooves having such a size that the engaging portion can pass through in order to
10 prevent position interference with the engaging portion when the flange unit is inserted into the mounting groove.

4. The method according to claim 1, wherein the stopper comprises:

15 a cylindrical body closely contacted and fixed to the inner diameter surface of the holder while covering the outer diameter surface of the metal bearing; and

a thin flange unit vertically bent to one end of the body, extended to the outside, and elastically deformed upon
20 contacting the engaging portion of the rotor.

5. The method according to claim 4, wherein the flange unit is molded into rubber having an excellent elastic deformability.

25